

**REMARKS**

Claims 1, 6, 11, and 16 are amended. No new matter is added by these amendments. Claims 3, 12, and 19 are canceled without prejudice or disclaimer. Claims 1-2, 4-11, 13-18, and 20 are pending. Applicant respectfully requests reconsideration and allowance of all claims in view of the amendments above and the remarks that follow.

**Claim Rejections under 35 U.S.C. 112**

Claims 1-20 are rejected under 35 U.S.C. 112 as failing to comply with the written description requirement because the specification "does not explain what constitutes the input model." Applicant respectfully traverses these grounds for rejection for the reasons argued below.

Applicant's specification defines an input model, e.g., at page 5, lines 19-21, which describes an input model as "an I/O model, which may be in the SPICE (Simulation Program with Integrated Circuit Emphasis), HSPICE, POWERSPICE, or IBIS (I/O Buffer Information Specification) data formats.

Applicant's specification further defines an input model at page 5, lines 23-24, as being defined using a model definition. Applicant's specification further gives an example of such a model definition on page 6, lines 1-6:

"MODEL

MODEL DRIVER\_1 (IN-OUT-ENABLE-VDD\_CORE-REF)

**ELEMENTS**

DRIVER\_R11 = MODEL Technology\_IOBook (OUT, IN, ENABLE, nrec\_out, REF, VDD)

ENDMODEL"

Applicant's specification at page 11, lines 16-19 further describes that an input

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model may be “a driver model or a receiver model,” where “[a] driver is a set of digital integrated circuit (IC) output ports that drive a multi-conductor interconnect structure loaded by the input ports of other integrated circuits, which are the receivers.”

Thus, applicant’s specification defines an input model.

Claims 1-20 are rejected under 35 U.S.C. 112 as being indefinite because “there should be no difference between the I/O model and the set of behavioral models.” Claims 1, 6, 11, and 16 are amended to recite that the behavioral models are “independent of cycle time, input pattern, and process points,” which provides a difference between the I/O model and the set of behavioral models. Claims 2, 4-5, 7-10, 13-15, 17, 18, and 20 are dependent on claims 1, 6, 11, and 16, respectively, and are definite by the amendment to their respective independent claims.

#### Claim Rejections under 35 U.S.C. 102

Claims 1-20 are rejected under 35 U.S.C. 102(b) over Moriyasu (U.S. 5,349,539). Claims 1-20 are rejected under 35 U.S.C. 102(b) over Kelsey (U.S. 5,452,227). Claims 1-20 are rejected under 35 U.S.C. 102(b) over Rostoker (U.S. 5,933,356). Claims 1-20 are rejected under 35 U.S.C. 102(b) over Jain (U.S. 6,044,211). Applicant respectfully submits that the claims are patentable over the Moriyasu, Kelsey, Rostoker, and Jain references because the references do not teach or suggest all of the elements of the claims, for the reasons argued below.

Claim 1 recites: “determining that an I/O model is a driver model; characterizing the I/O model, wherein the characterizing further comprises performing a simulation of driver output open circuit voltage; ... the behavioral models are independent of cycle time, input pattern, and process points.” None of Moriyasu, Kelsey, Rostoker, and Jain teach or suggest determining that an I/O model is a driver mode or performing a simulation of driver output open circuit voltage. Further None of Moriyasu, Kelsey, Rostoker, and Jain teach or suggest a behavior model that is independent of cycle time, input pattern, and process points.

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Claim 6 recites: "means for determining that an I/O model is a driver model; ... means for performing a simulation of driver output open circuit voltage; ...behavioral models are independent of cycle time, input pattern, and process points." None of Moriyasu, Kelsey, Rostoker, and Jain teach or suggest determining that an I/O model is a driver model or performing a simulation of driver output open circuit voltage. Further, None of Moriyasu, Kelsey, Rostoker, and Jain teach or suggest behavioral models that are independent of cycle time, input pattern, and process points.

Claim 11 recites: "determining that an I/O model is a receiver model; ... calculating a high-to-low receiver threshold voltage of the receiver model; the behavioral models are independent of cycle time, input pattern, and process points," which is not taught or suggested by Moriyasu, Kelsey, Rostoker, and Jain.

Claim 16 recites: "determining that an I/O model is a receiver model; ... calculating a high-to-low receiver threshold voltage of the receiver model, ... the behavioral models are independent of cycle time, input pattern, and process points," which is not taught or suggested by Moriyasu, Kelsey, Rostoker, and Jain.

Claims 2, 4-5, 7-10, 13-15, 17-18, and 20 are dependent on claims 1, 6, 11, and 16, respectively, and are patentable over the references for the reasons argued above plus the elements in the claims.

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Conclusion

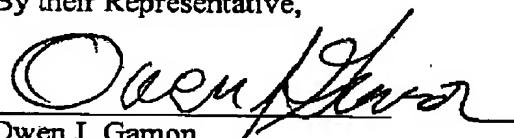
Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is requested. The Examiner is invited to telephone Applicant's attorney (651-645-7135) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 09-0465.

Respectfully submitted,

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By their Representative,

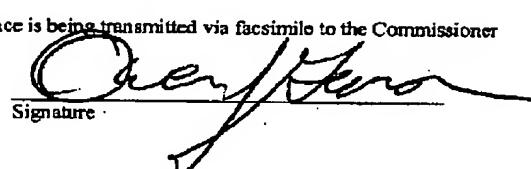
  
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CERTIFICATE UNDER 37 CFR 1.8: I hereby certify that this correspondence is being transmitted via facsimile to the Commissioner for Patents 571-273-8300, on November 2, 2006.

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